

## Spurious fingerprint rejection by variable illumination

**Publication number:** EP1096417

**Publication date:** 2001-05-02

**Inventor:** HSU SHI-PING (US); ZSOLNAY DENES L (US)

**Applicant:** TRW INC (US)

**Classification:**



- international: **A61B5/117; G06K9/00; G06T1/00; A61B5/117; G06K9/00; G06T1/00; (IPC1-7): G06K9/00**

- European: **G06K9/00A1G**




**Application number:** EP20000122910 20001020

**Priority number(s):** US19990430946 19991101

**Also published as:**

 JP2001167258 (A)  
 EP1096417 (A3)

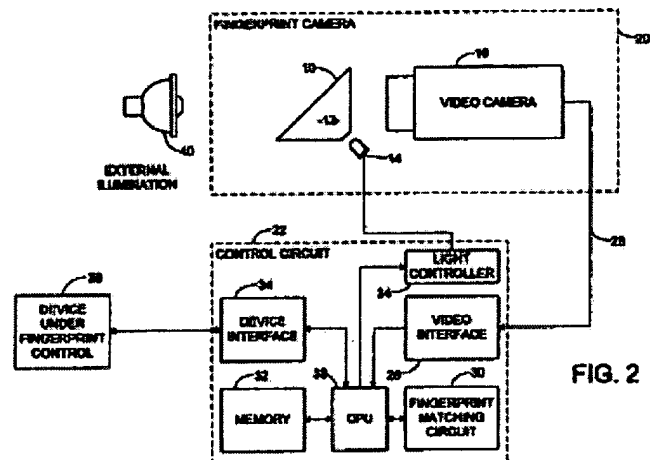
**Cited documents:**

 US4872203  
 EP0880104  
 JP4277874

[Report a data error here](#)

### Abstract of **EP1096417**

Apparatus and a method for its use, for rejecting spurious fingerprint images obtained from a fingerprint camera (20). The camera has internal illumination (14) that is changed significantly after capturing a candidate fingerprint image and before capturing a secondary fingerprint image. If the candidate and secondary fingerprint images are similar, as determined (60) in a fingerprint matching circuit (30) the fingerprint image is rejected as probably spurious. If the candidate and secondary images are dissimilar, the fingerprint image is accepted as probably genuine. Changing the internal illumination (14) may be effected by switching the illumination completely off, or by changing its brightness or color.



Data supplied from the **esp@cenet** database - Worldwide

(19)



Europäisches Patentamt

European Patent Office

Office européen des brevets



(11)

EP 1 096 417 A2

(12)

## EUROPEAN PATENT APPLICATION

(43) Date of publication:  
02.05.2001 Bulletin 2001/18

(51) Int. Cl.<sup>7</sup>: G06K 9/20, A61B 5/117,  
G06K 9/00

(21) Application number: 00122910.3

(22) Date of filing: 20.10.2000

(84) Designated Contracting States:  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU  
MC NL PT SE  
Designated Extension States:  
AL LT LV MK RO SI

(30) Priority: 01.11.1999 US 430946

(71) Applicant: TRW Inc.  
Redondo Beach, California 90278 (US)

(72) Inventors:  
• Hsu, Shi-Ping  
Pasadena, CA 91107 (US)  
• Zsolnay, Denes L.  
Rolling Hills Estates, CA 90274 (US)

(74) Representative:  
Schmidt, Steffen J., Dipl.-Ing.  
Wuesthoff & Wuesthoff,  
Patent- und Rechtsanwälte,  
Schweigerstrasse 2  
81541 München (DE)

## (54) Spurious fingerprint rejection by variable illumination

(57) Apparatus and a method for its use, for rejecting spurious fingerprint images obtained from a fingerprint camera (20). The camera has internal illumination (14) that is changed significantly after capturing a candidate fingerprint image and before capturing a secondary fingerprint image. If the candidate and secondary fingerprint images are similar, as determined (60) in a fingerprint matching circuit (30) the fingerprint image is

rejected as probably spurious. If the candidate and secondary images are dissimilar, the fingerprint image is accepted as probably genuine. Changing the internal illumination (14) may be effected by switching the illumination completely off, or by changing its brightness or color.

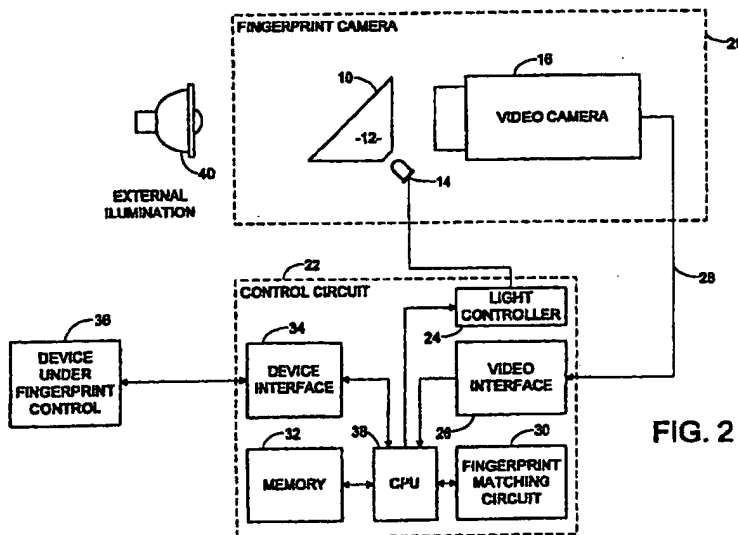


FIG. 2

EP 1 096 417 A2